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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,440	08/01/2003	Michael T. Roeder	200313512-1	4552
22879 7590 03/12/2009 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER YUEN, KAN	
			ART UNIT 2416	PAPER NUMBER
			NOTIFICATION DATE 03/12/2009	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/633,440	<b>Applicant(s)</b> ROEDER, MICHAEL T.	
	<b>Examiner</b> KAN YUEN	<b>Art Unit</b> 2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,9-16,18,19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,9-16,18,19 and 21-25 is/are rejected.
- 7) ☒ Claim(s) 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Detailed Action***

In view of the Appeal Brief filed on 12/04/2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid.

A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below:

***Response to Arguments***

1. Applicant's arguments, see remark, filed on 12/04/2008, with respect to the rejection(s) of claim(s) 1, 3-6, 9-16, 18, 19 and 21-26 under 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of APA and Stanwood et al. (Pub No.: 2005/0243745).

***Claim Objections***

2. Claim objected to because of the following informalities:

Claim 6 is depending on claim 2 which is now cancelled. Examiner treated the claim 6 as if it was depending on claim 1.

In claim 10, the phrase: "wherein the fabric-adjusted meter modifier is also dependent on a payload size of the packet", seems to be redundant because the same phrase was claimed in claim 9, lines 5-6. Similar problem exists in claim 25. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 6, the phrase: "technology of a limiting uplink" is considered vague and indefinite. The examiner does not know whether the term "technology" is referring to the parameter of the uplink or the connection type of the uplink or scheduling of the uplink. Applicant is suggested to further define the phrase "technology of a limiting uplink". Similar problem exists in claims 9, 15, 16 and 21.

***Claim Rejections - 35 USC § 103***

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 3-5, 9-12, 15, 16, 21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745).

**For claim 1**, the APA disclosed the method of assigning service priorities to traffic from a plurality of sources using meters, the method comprising:

receiving a packet that is placed into a specific class of service (COS) group pertaining to a specific service being tracked and controlled (APA see page 4, and fig.

2). A packet is received and attributed by the router to a specific COS group. The

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specific COS group may be labeled and pertains to a specific service being tracked and controlled;

determining a fabric-adjusted meter modified depending on a payload size of the packet and on technology of a limiting uplink being used (APA see page 4, and fig. 2).

When a packet attributed to group is received, a meter modifier based on a payload size of the packet is added to the corresponding meter; and

adding the fabric-adjusted meter modifier to a meter corresponding to the specific COS group, wherein the meter comprising a counter that tracks traffic associated with the service over a period of time, and wherein the adding updates the meter (APA see page 4, and fig. 2). When a packet attributed to group is received, a meter modifier based on a payload size of the packet is added to the corresponding meter.

However, the APA does not explicitly disclose the feature of determining a fabric-adjusted meter modified depending on technology of a limiting uplink being used.

Stanwood et al. from the same or similar fields of endeavor disclosed the feature of determining a fabric-adjusted meter modified depending on technology of a limiting uplink being used (Stanwood et al. see paragraphs 0071-0076). The technique used to monitor and control the uplink/downlink bandwidths fundamentally comprises two phases: an initialization phase and a tracking or monitoring/updating phase. During the tracking/monitoring phase, the system (base stations) monitors and thereby learns (determines) about the actual bandwidth requirements (modifier) of the system. The system then adapts (modifies) to the bandwidth needs by updating (adding) the initial

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bandwidth parameters with the actual uplink/downlink bandwidth parameters (technology of a uplink).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Stanwood et al. in the network of the APA. The motivation for using the feature being that no matter what technique is used, the present invention can be employed to flexibly adapt the uplink/downlink time slot allocation and bandwidth once the bandwidth requirements are determined.

**Regarding claims 3 and 11**, APA disclosed the method of determining if the meter exceeds a black-type limit for the specific COS group; and if the black-type limit is exceeded, then dropping the packet (APA see page 4, and fig. 2);

**Regarding claims 4 and 12**, APA disclosed the method of determining if the meter exceeds a red-type limit for the specific COS group; and if the red-type limit is exceeded, then lowering a priority level of the packet (APA see page 4, and fig. 2);

**Regarding claim 5**, APA disclosed the method of determining if the COS meter exceeds a limit for the specific COS group and if the limit is exceeded then perform an action, specified for the limit (APA see page 4, and fig. 2). According to the APA, if black limit is exceeded, the packets would be dropped.

**Claims 9 and 15** are rejected similar to claim 1.

**Regarding claim 10**, APA disclosed the feature wherein the fabric-adjusted meter modifier is also dependent on a payload size of the packet (APA see page 4, and fig. 2);

**Regarding claim 16**, the APA disclosed the method of implementing class of service (COS) functionality in a telecommunications system, the method comprising:

defining a user-configurable function (payload size) by way of a user interface and assigning the user-configurable function to be a meter modifier function associated with a class of service group in the system (APA see page 4 and fig. 2). When a packet attributed to group Ci is received by a router (interface), the packet size is defined. A meter modifier (meter modifier function) is determined or assigned based on a payload size of the packet, and the modifier is added to the corresponding meter. This updates the meter. Therefore, the meter modifier is determined/assigned based on the payload size of the packet received by the router or interface, and the meter modifier functions can be added to meters to update the meters;

adding the meter modifier function to a group meter, wherein said adding updates the group meter (APA see page 4 and fig. 2). When a packet attributed to group Ci is received by a router (interface), a meter modifier (meter modifier function) based on a payload size of the packet is added to the corresponding meter.

However, the APA did not explicitly disclose the feature wherein the meter modifier function is used to adjust for a fabric uplink technology.

Stanwood et al. from the same or similar fields of endeavor disclosed the feature wherein the meter modifier function is used to adjust for a fabric uplink technology (Stanwood et al. see paragraphs 0071-0076). The technique used to monitor and control the uplink/downlink bandwidths fundamentally comprises two phases: an initialization phase and a tracking or monitoring/updating phase. During the



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tracking/monitoring phase, the system (base stations) monitors and thereby learns (determines) about the actual bandwidth requirements (modifier function) of the system. The system then adapts (modifies) to the bandwidth needs by updating (adjusting) the initial bandwidth parameters with the actual uplink/downlink bandwidth parameters (technology of a uplink).

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Stanwood et al. in the network of the APA. The motivation for using the feature being that no matter what technique is used, the present invention can be employed to flexibly adapt the uplink/downlink time slot allocation and bandwidth once the bandwidth requirements are determined.

**Claim 21** is rejected similar to claim 16.

**Regarding claim 25**, the APA disclosed the feature wherein the fabric-adjusted meter modifier is also dependent on a payload size of the packet (APA see page 4, and fig. 2).

7. Claims 6 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745) as applied to claim 2 above, and further in view of Lee et al. (Pub No.: 2002/0049852).

**For claims 6, 13** the APA and Stanwood et al. both did not explicitly disclose the feature wherein determining the fabric-adjusted meter modifier comprises retrieving a modifier value associated with the payload size from a technology-specific look-up table. Lee et al. from the same or similar fields of endeavor disclosed the feature

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wherein determining the fabric-adjusted meter modifier comprises retrieving a modifier value associated with the payload size from a technology-specific look-up table (Lee et al. see paragraph 0085). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Lee et al. in the network of the APA and Stanwood et al. The motivation for using the feature being increases system utilization.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745) as applied to claim 9 above, and further in view of Norrell et al. (Pat No.: 6874096).

**For claim 14**, the APA and Stanwood et al. both did not explicitly disclose the feature wherein the calculation circuitry comprises a plurality of comparators and an adder to sum outputs of the comparators. Norrell et al. from the same or similar fields of endeavor teaches a plurality of comparators and an adder to sum outputs of the comparators (Norrell et al. see fig. 2, 202, 204, and 208, and see column 4, lines 29-35). In the reference, the low pass filters 202, and 204 can be interpreted as the comparators, and the summation 208 summed up the outputs of the low pass filters.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Norrell et al. in the network of the APA and Stanwood et al. The motivation for using the feature being that it provides system accuracy.

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9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745) as applied to claim 16 above, and further in view of Hao (Pub No.: 2005//0105469).

**For claim 18**, the APA and Stanwood et al. both did not explicitly disclosed the feature wherein the user-configurable function depends on a current value of the meter. Hao from the same or similar fields of endeavor disclosed the feature wherein the user-configurable function depends on a current value of the meter (Hao see paragraph 0026). The system 101 monitors the current traffic pattern of the flow of the data packets to predict the future data flow for each chip. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Hao et al. in the network of the APA and Stanwood et al. The motivation for using the feature being that it provides real-time data transmission in the system.

10. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745) as applied to claim 16 above, and further in view of Katayama (Pub No.: 2005/0163141).

**For claim 19**, the APA and Stanwood et al. both did not explicitly disclosed the feature wherein the user-configurable function depends on a last destination of a packet forwarded by the system. Katayama from the same or similar fields of endeavor disclosed the feature wherein the user-configurable function depends on a last destination of a packet forwarded by the system (Katayama see paragraph 0013). Thus,

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it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the feature as taught by Katayama et al. in the network of the APA and Stanwood et al. The motivation for using the feature being that it provides reliability in the system.

11. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (APA) in view of Stanwood et al. (Pub No.: 2005/0243745) as applied to claim 1 above, and further in view of Valvo et al. (Pat No.: 7292534).

**For claim 22**, the APA and Stanwood et al. did not explicitly disclosed the feature wherein the fabric-adjusted meter modifier is different for hardware-based and software-based routing. Valvo et al. disclosed the feature wherein the fabric-adjusted meter modifier is different for hardware-based and software-based routing (Valvo et al. column 1, lines 60-67). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Valvo et al. in the network of the APA and Stanwood et al. The motivation for using the feature being that it provides system accuracy.

**Regarding claim 23**, Valvo et al. disclosed the fabric-adjusted meter modifier is different for hardware-based routing to an Ethernet link and hardware-based routing to a Synchronous Optical Network (SONET) link (Valvo et al. column 1, lines 60-67).

**Regarding claim 24**, Valvo et al. disclosed the fabric-adjusted meter modifier is different for hardware-based routing to an Ethernet link and hardware-based routing to a Synchronous Optical Network (SONET) link (Valvo et al. column 1, lines 60-67).

***Examiner's Note:***

Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

***Allowable Subject Matter***

12. Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAN YUEN whose telephone number is (571)270-1413. The examiner can normally be reached on Monday-Friday 10:00a.m-3:00p.m EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky O. Ngo can be reached on 571-272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kan Yuen/  
Examiner, Art Unit 2416

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